formed in conformity with the protrusions and recesses formed on the surface of the roughened surface.

[0034] In addition, in order to achieve the objects described above, an electronic apparatus of the present invention comprises one of the liquid crystal display devices described above. As described above, since superior display characteristics can be obtained by this liquid crystal display device, it is preferably used as a display device for various electronic apparatuses.

[0039] Each manufacturing method described above preferably further comprises, after the step for forming the roughened area, a step of removing the mask material and a step of etching the area which is previously covered with the mask and the roughened area. By the etching described above, the shape of the roughened area can be controlled to have a predetermined shape. In the step described above, when etching is performed before the mask material is removed, a problem may arise in that the difference in height between the roughened area and the flat area is increased. As a result, when the difference in height exceeds a predetermined cell gap of the liquid crystal display device, the substrate cannot be used for the liquid crystal display device. On the other hand, when etching is uniformly performed on the roughened area and the flat area after the mask material is removed, advantage can be obtained in that the increase in difference in height between the two areas can be suppressed.

[0090] The reflective layer 111, the insulating layer 112, the color filter layer 113, the protective layer 114, and the alignment film 116 are formed in the roughened area 11b on the backside substrate 11. The formations mentioned above are described below in detail. In this embodiment, as shown in Fig. 1, the periphery 22 of the protective layer 114 is located outside (that is, the sealing material 13 side) the periphery 21 of the reflective layer 111. In addition, the alignment film 116 is formed over the surface of the protective layer 114. Accordingly, among the elements formed on the backside substrate 11, the periphery 22 of the protective layer 114 is located at the outermost place when observed from the front substrate 12 side. In addition, as shown in Fig. 1, the protective layer 114 is formed so as to be in the roughened area 11b of the backside substrate 11. Accordingly, the reflective layer 111, the insulating layer 112, the color filter 113, the protective layer 114, and the alignment film 116 are all formed in the roughened area 11b. In other words, the elements formed on the backside substrate 11 do not extend over the step formed at the boundary 23 of the flat area 11a and the roughened area 11b. As shown in Fig. 1, an area from the inside periphery of the sealing material 13 to the pixel located at the outermost place among the pixels aligned in a matrix is a non-display area 25, and an area inside the non-display area 25 is the display area 24. Accordingly, as it is understood from a boundary 26 shown in Fig. 3, the entire display area 24 is formed in the roughened area 11b when observed from the front substrate 12 side.